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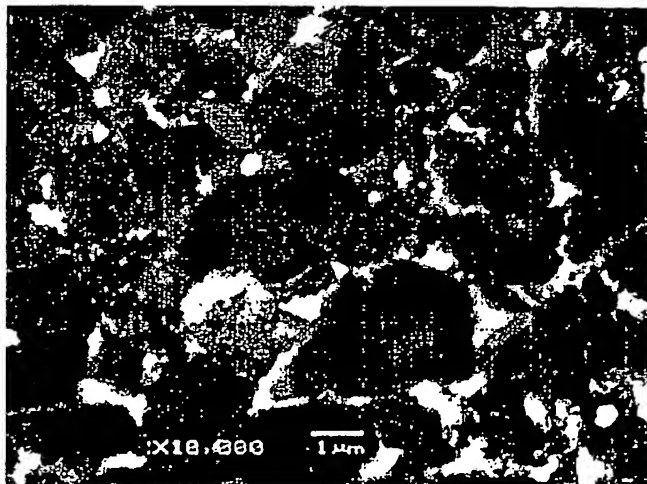
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(54) Title: SINTERED BODY WITH HIGH HARDNESS FOR CUTTING CAST IRON AND THE METHOD FOR PRODUCING THE SAME



(57) Abstract: Disclosed is a sintered body with high hardness for cutting cast iron, which contains cubic boron nitride(CBN), high pressure phase nitride. The sintered body of the present invention is prepared by sintering cubic boron nitride powder and powder of bonding materials on a WC/Co based hard substrate, and by forming hard layer of polycrystalline cubic boron nitride(PCBN). The bonding materials are two or more of materials selected from the group composed of titanium, aluminum and nickel, and carbide thereof, nitride thereof, boride thereof and carbon nitride thereof, and mutual solid solution compound thereof. Volume fraction of the CBN in the PCBN hard layer is 80-98% by volume. By using the sintered body of the present invention it is possible to produce fine CBN powder with increased durability and thermal stability, improving the physical property of the product.

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